INDUSTRIAL NOTES.

The Crocker-Wheeler Arc-Current Motor.

THE first electric motors placed on the market by the Crocker-Wheeler Company were intended to be operated by a current of constant potential and low tension,—what is usually termed "an incandescent-light current." Those motors were described and illustrated in these columns several months ago. While there is a large and steadily widening field for those constant potential motors, and an increasing demand for them, there is also a field and a demand for motors wound for higher tension and constant current, to be operated on an arc-light circuit. To meet this demand the motor shown in Fig. 1 has been produced by the Crocker-Wheeler Company. The regulation of this motor is effected in the same way as in the same company's constant-potential motor; namely, by causing the armature to automatically move out of or into the field, thereby keeping the amount of torque or magnetic pull exactly proportionate to the work being done. The speed is thus kept constant, no matter what the variation in the current or the load. The commutator and shaft bearings are made sufficiently long to admit of this longitudinal movement, which, besides its main function of varying the position of the armature with regard to the pole-pieces, also distributes the wear more uniformly on brushes, armature, and bearings.

Fig. 2 shows a novel application of a safety-cage or wire guard to a fan driven by a Crocker Wheeler motor. This guard is intended mainly to protect the fingers of children or meddlers from the effect of contact with the rapidly revolving fan, we suppose, as we have observed that in cases of such contact the fan, like the equally deceptive buzz-saw, usually protects itself. An electric fan at full speed is cooling and comforting on a hot day, and very pleasing to the eye, but it will not bear handling.

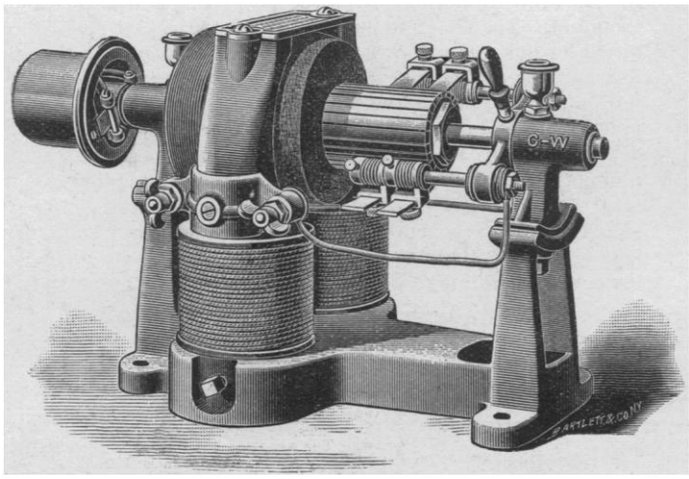

FIG. 1.

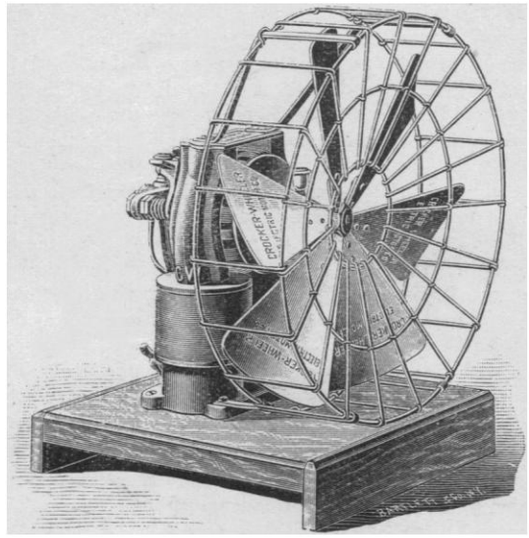

FIG. 2.

As an effect of the extraordinary demand for electric motors produced by a better public appreciation of their merits, the Crocker-Wheeler Company have been compelled to remove from their former factory, which was by no means small, to a new location,—probable the largest establishment of its kind in the world.

CALENDAR OF SOCIETIES.

Biological Society, Washington.

May 3.—Robert Reyburn, The Life-History of Micro-organisms with its Relation to the Theory of Evolution; George Vasey, A New Grass Genus; W. H. Seaman, The Place of Biology in Public School Instruction; F. A. Lucas, The Present Status of Aurochs.

New York Academy of Anthropology.

May 6.—Edward C. Towne, The Physiological Causes and Evolutionary Conditions of Negro, Indian, and other Inferior-Race Peculiarities (a paper especially designed to present a scientific solution of the negro problem).

May 13.—Lucy M. Hall, The Disposal of the Dead.

Appalachian Mountain Club, Boston.

May 9. — W. F. Dusseault, The White Mountains of New Hampshire; Exhibition of a very fine collection of stereopticon views, prepared by members of the Boston Camera Club.

Boston Society of Natural History.

May 7, Election of Officers.—President, F. W. Putnam; vice-presidents, William H. Niles, B. Joy Jeffries; curator, Alpheus Hyatt; honorary secretary, J. C. White; secretary, J. Walter Fewkes; treasurer, Charles W. Scudder; librarian, J. Walter Fewkes.

J. A. Jeffries, Lamarckism, with an Example; H. W. Haynes exhibited for G. Frederick Wright the palæolithic implement recently discovered by Mr. W. C. Mills in the valley of the Tuscarawas, Ohio.